CLAIM AMENDMENT

Please amend the claims in accordance with the following listing.

Listing of Claims:

Claim 1 (Currently Amended):   A method, including steps of

determining current first values for a plurality of first parameters and at least one second

parameter for a communication link, said first parameters being associated with a first layer of an

OSI model communication system and said second parameter being associated with a second layer

of an the OSI model communication system;

sending first information using said current first values;

obtaining second information regarding characteristics of said communication link in

response to a result of said steps of sending; and

determining dynamic exact first values for the plurality of the parameters in response to the

characteristics of said communication link; and

adjusting a plurality of said first values for the plurality of the parameters in conjunction in

response to said second information, said step of adjusting comprising linearly mixing each current

first value for the plurality of the parameters with a corresponding dynamic exact first value,

whereby further use of said communication link is responsive to said steps of adjusting.

Claim 2 (Original):   A method as in claim 1, wherein said first layer and said second layer

are selected from the group: a physical layer, a media access layer, a network layer, a transport layer,

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an application layer.

Claim 3 (Original):   A method as in claim 1, wherein said first parameters include at least two of: an antenna selection value, a power level value, a channel selection value, a modulation type value, a symbol rate value, an error code type value, a set of equalization values.

Claim 4 (Original):   A method as in claim 1, wherein said second parameters include at least one of: a payload element size, a message size value, a set of acknowledgment and retransmission values, a TDD duty cycle value.

Claim 5 (Original):   A method as in claim 1, wherein said steps of adjusting include steps of dynamically selecting a set of altered first values in response to said second information, said set of altered first values including at least two changes to said first parameters and said second parameters, said set of altered first values having been determined to be superior to altered first values having only one change to said first parameters and said second parameters.

Claim 6 (Original):   A method as in claim 1, wherein said communication link is subject to at least one of: interference effects, multipath effects, both interference effects and multipath effects.

Claim 7 (Original):   A method as in claim 1, wherein said communication link includes a wireless communication link.

Claim 8 (Original): A method as in claim 1, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using a plurality of: frequency division, time division, space division, spread spectrum code division.

Claim 9 (Original): A method as in claim 1, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least one of: frequency division, time division, space division, spread spectrum code division.

Claim 10. (Canceled).

Claim 11. (Canceled).

Claim 12. (Original): A method as in claim 1, wherein said steps of adjusting are responsive to a type of protocol being used by at least one of the group: a physical layer, a media access layer, a network layer, a transport layer, an application layer.

Claim 13. (Original): A method as in claim 12, wherein said steps of adjusting are responsive to whether an application layer protocol is for asymmetric transfer of information.

Claim 14. (Original): A method as in claim 12, wherein said steps of adjusting are

responsive to whether an application layer protocol is for sending voice or video information.

Claim 15. (New): A base station controller comprising:

a processor that controls sending and receiving information over a communication link responsive to at least first parameters associated with a first layer of OSI model communication system and one or more second parameters associated with a second layer of the OSI model communication system; and

a memory that stores instructions, the memory being coupled to the processor, the instructions, when executed by the processor, cause the processor to perform steps of:

determining current first values for a plurality of the first parameters and the one or more second parameters for the communication link;

sending first information using said current first values;

obtaining second information regarding characteristics of said communication link in response to a result of said step of sending;

determining dynamic exact first values for the parameters in response to the second information; and

adjusting a plurality of first values for the parameters, said step of adjusting comprising linearly mixing each current first value with a corresponding dynamic exact first value, whereby further use of said communication link is responsive to said step of adjusting.

Claim 16 (New): A base station controller as in claim 15, wherein said first layer and

said second layer are selected from the group of a physical layer, a media access layer, a network layer, a transport layer, and an application layer.

Claim 17 (New):   A base station controller as in claim 15, wherein said first parameters comprise at least two parameters selected from the group of an antenna selection parameter, a power parameter, a channel selection parameter, a modulation type parameter, a symbol rate parameter, an error code type parameter, and a set of equalization parameters.

Claim 18 (New):   A base station controller as in claim 15, wherein said one or more second parameters comprise at least one parameter selected from the group of a payload element size parameter, a message size parameter, a set of acknowledgment and retransmission parameters, and a TDD duty cycle parameter.

Claim 19 (New):   A base station controller as in claim 15, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least two kinds of multiple access selected from the group of frequency division, time division, space division, and spread spectrum code division.

Claim 20 (New):   A base station controller as in claim 15, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least one kind of multiple access selected from the group of frequency division, time division, space

division, and spread spectrum code division.

Claim 21. (New): A base station controller as in claim 15, wherein said step of adjusting is responsive to a type of protocol being used by at least one layer selected from the group of a physical layer, a media access layer, a network layer, a transport layer, and an application layer.

Claim 22. (New): A base station controller as in claim 21, wherein said step of adjusting is responsive to whether an application layer protocol is for asymmetric transfer of information.

Claim 23. (New): A base station controller as in claim 21, wherein said step of adjusting is responsive to whether an application layer protocol is for sending voice or video information.

Claim 24. (New): An article of manufacture comprising a memory storing a set of instructions that, when executed by a processor that controls sending and receiving information over a communication link responsive to at least first parameters associated with a first layer of OSI model communication system and one or more second parameters associated with a second layer of the OSI model communication system, cause the processor to perform steps of:

determining current first values for a plurality of the parameters for the communication link;

sending first information using said current first values;

obtaining second information regarding characteristics of said communication link in response to a result of said step of sending;

determining dynamic exact first values for the plurality of the parameters in response to the second information; and

adjusting the plurality of the parameters, said step of adjusting comprising linearly mixing each current first value with a corresponding dynamic exact first value, whereby further use of said communication link is responsive to said step of adjusting.

Claim 25 (New):   An article of manufacture according to claim 24, wherein said first layer and said second layer are selected from the group of a physical layer, a media access layer, a network layer, a transport layer, and an application layer.

Claim 26 (New):   An article of manufacture according to claim 24, wherein said first parameters comprise at least two parameters selected from the group of an antenna selection parameter, a power level parameter, a channel selection parameter, a modulation type parameter, a symbol rate parameter, an error code type parameter, and a set of equalization parameters.

Claim 27 (New):   An article of manufacture according to claim   24, wherein said one or more second parameters comprise at least one parameter selected from the group of a payload element size parameter, a message size parameter, a set of acknowledgment and retransmission parameters, and a TDD duty cycle parameter.

Claim 28 (New):   An article of manufacture according to claim 24, wherein said

communication link includes a wireless communication link.

Claim 29 (New): An article of manufacture according to claim 24, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least two kinds of multiple access selected from the group of frequency division, time division, space division, and spread spectrum code division.

Claim 30 (New): An article of manufacture according to claim 24, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least one kind of multiple access selected from the group of frequency division, time division, space division, and spread spectrum code division.

Claim 31. (New): An article of manufacture according to claim 24, wherein said step of adjusting is responsive to a type of protocol being used by at least one layer selected from the group of a physical layer, a media access layer, a network layer, a transport layer, and an application layer.

Claim 32. (New): An article of manufacture according to claim 31, wherein said step of adjusting is responsive to whether an application layer protocol is for asymmetric transfer of information.

Claim 33. (New): An article of manufacture according to claim 31, wherein said step of

adjusting is responsive to whether an application layer protocol is for sending voice or video information.

Claim 34 (New): A method of self-optimizing point to multipoint communication, the method including steps of:

determining current values for a plurality of parameters for a communication link;

determining characteristics of said communication link;

determining exact values corresponding to said characteristics of said communication link; and

determining new values for said plurality of parameters based on differences between said current values and said exact values using hysteresis parameters applied to said differences;

whereby said current values have a persistent effect on said new values.

Claim 35 (New): A method as in claim 34, wherein in said step of determining new values, said differences are multiplied by said hysteresis parameters.

Claim 36 (New): A method as in claim 34, wherein said parameters are associated with layers of an OSI model communication system.

Claim 37 (New): A method as in claim 36, wherein said layers are selected from the group: a physical layer, a media access layer, a network layer, a transport layer, an application layer.

Claim 38 (New): A method as in claim 34, wherein said parameters include at least two of: an antenna selection value, a power level value, a channel selection value, a modulation type value, a symbol rate value, an error code type value, a set of equalization values.

Claim 39 (New): A method as in claim 34, wherein said parameters include at least one of: a payload element size, a message size value, a set of acknowledgment and retransmission values, a TDD duty cycle value.

Claim 40 (New): A method as in claim 34, wherein said communication link is subject to at least one of: interference effects, multipath effects, both interference effects and multipath effects.

Claim 41 (New): A method as in claim 34, wherein said communication link includes a wireless communication link.

Claim 42 (New): A method as in claim 34, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using a plurality of: frequency division, time division, space division, spread spectrum code division.

Claim 43 (New): A method as in claim 34, wherein said communication link includes a

plurality of distinguishable channels, said channels being distinguished using at least one of: frequency division, time division, space division, spread spectrum code division.

Claim 44 (New):   A method as in claim 34, wherein said method is responsive to a type of protocol being used by at least one of the group: a physical layer, a media access layer, a network layer, a transport layer, an application layer.

Claim 45 (New):   A method as in claim 34, wherein said method is responsive to whether an application layer protocol is for asymmetric transfer of information.

Claim 46 (New):   A method as in claim 34, wherein said method is responsive to whether an application layer protocol is for sending voice or video information.